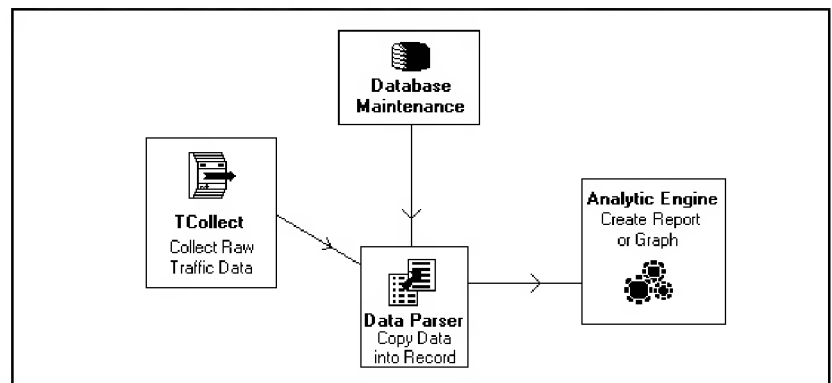


Database Maintenance

Traffic Analysis Database Maintenance is responsible for the organization and manipulation of traffic data. Figure 12 provides an overview of Traffic Analysis Database Maintenance.

Figure 12
Overview of Database Maintenance



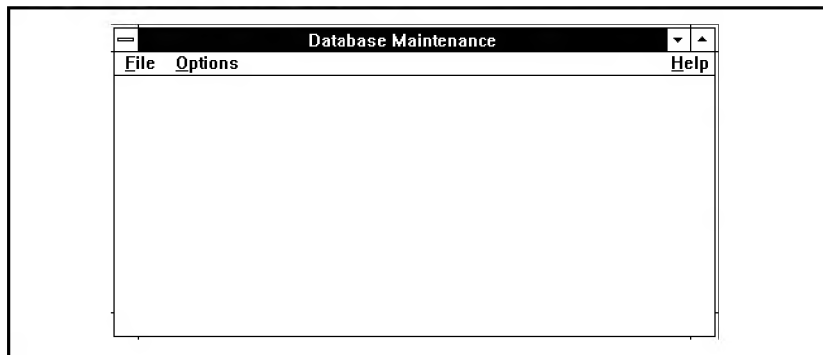
Each Meridian 1 site uses a separate Traffic Database file. The MAT Communications Supervisor uses TCollect to receive raw traffic data from the Meridian 1. A Data Parser converts the raw data into a form suitable for analysis. The traffic data is stored in the Traffic Database where it can be used to produce graphs and reports. A Data Extractor extracts specific traffic data based on the filters you define, and passes this data to the Analytic Engine, which produces reports and graphs. Database Maintenance gives you access to the formatted traffic database.

Database Maintenance window

Database Maintenance lets you archive a range of traffic data and backup and restore traffic data files. Select *Traffic Database* from the Traffic Analysis Maintenance menu. The Database Maintenance window appears as shown in Figure 13. Use the **File** and **Options** menus to access database maintenance functions.

Note: You cannot archive or backup CDR data files from TAM. For information on how to do so, please refer to the *MAT Call Accounting User's Guide*.

Figure 13
Database Maintenance window



Traffic database file names

Raw traffic data is stored in a file named TRAFFIC.DMP. Parsed (formatted) data is placed in sequentially-named traffic database files (TFS001.DAT, TFS002.DAT, TFC001.DAT, and so forth). These files are indexed by date and time through sample numbers, and are used to generate reports and graphs.

Traffic database operations

Traffic database files steadily increase in size until they are too large to maintain and use efficiently. You should therefore archive old data into a separate directory or onto diskettes. (Using diskettes frees up disk space on your PC.) When necessary, you can merge this archived data back into the database for analysis.

If your PC is damaged or its drive is corrupted, you could lose valuable traffic data that you have not yet analyzed. To ensure the safety of this data, back up your files regularly (weekly or monthly) to diskettes. If you do lose data on your PC, you can recover it by restoring your backup files.

The Traffic Analysis File menu provides the following selections to help you maintain your traffic database files.

Backup

Use **Backup** to back up specific traffic database files to a separate drive or directory. Remember to back up your database files regularly to ensure the security of your traffic data.

You should also back up your archived files. The **Archive** selection moves a range of traffic data files to a new location and deletes this range from the traffic database. Backing up the archived database files ensures that these files are not lost.

To back up the traffic database files, select **Backup** from the File menu. A Source drive and directory dialog prompts you to enter the disk drive, path, and file name of your source files (for example, **C:\MAT*.DAT**). Enter the files to be backed up and click on **OK**.

In the Destination drive dialog, enter the destination drive, directory, and file name for the backup (for example, **A:*.DAT**). Click on **OK** to start the backup procedure.

Depending on the size of the files and the capacity of your destination drive, the system may prompt you to enter more diskettes during the backup. Follow the instructions the PC provides. When the system completes the backup procedure, it returns you to the Database Maintenance window.

Restore

Use **Restore** to copy previously backed-up database files into your working directory. To restore backed up files to the PC, select **Restore** from the File menu. The Source dialog prompts for the source disk drive and directory where you had previously backed up the files (for example, **A:**). Enter the source drive and path and click on **OK**. The Destination dialog prompts for the destination drive and directory where you wish to copy these files. Enter the destination drive and directory (for example, **C:\MAT**) and click on **OK** to start the Restore procedure.

If the Restore source files are on diskettes, the system prompts you to insert the source diskettes in the diskette drive. Continue to insert the diskettes when prompted. When the system finishes restoring the files to the destination directory, it displays a message indicating that the Restore procedure was successful, and returns to the Database Maintenance window.

Archive

As Traffic Analysis collects traffic data from the Meridian 1, it will continue to place the data in the traffic database files (with file names like TFS001.DAT). This database will eventually become too large to maintain and process easily. The Archive utility allows you to move a range of traffic data to another drive or directory for later use.

For example, you may wish to analyze only the data collected for the month of January, but you have traffic data from January to December. You could archive the data collected from February to December. Later, you can use Merge to move this range of traffic data back into your traffic database.

Before you can archive traffic data, you must define a range for the data to be archived using the Filter Editor. The system saves the data within that range from each traffic data file and archives the data in a file named ARCHIVE.DAT. The system deletes that range from the data files of the traffic database.

To archive a range of traffic data, select **Archive** from the File menu. The Filter File selection dialog appears. Select a filter to enter your data range by typing in the filter name or selecting an existing filter name from this file list, and clicking on **OK**.

Note: If you wish to create a new filter, access the Filter Editor by clicking on the **Filter Editor** command from the Maintenance menu. In the Filter Editor dialog, enter the date and time ranges of the data to be archived. For example, to archive data from February to December, enter: **02/01** to **12/31** in the first date fields and click on **Include**. Select **Save** from the File menu to save this filter.

After you select the filter containing the range for the data to be archived, the destination dialog appears to allow you to specify a destination file (the default file is A:\ARCHIVE.DAT). Click on **OK** to start the Archive procedure.

Note: These files are erased from your working traffic database when they are archived. You should therefore back up this archived data to another drive for security. To back up this file, select **Backup** from the File menu and select the archive file (**ARCHIVE.DAT**) for backup.

Merge

Use **Merge** to merge the archived data back into the working traffic database. **Merge** properly indexes the archived data with the current data, ensuring that these files are in the proper order in the traffic database. You can also use **Merge** to merge any lost data that you have re-indexed using **ReIndex**.

To merge archived data with the current data files in the traffic database, select **Merge** from the File menu. In the File selection dialog, type the name of the archived data file you wish to merge with your working directory's traffic data file. Click on **OK** to merge this data with your traffic database files.

ReIndex

In some instances, the traffic data collected from the Meridian 1 may be numbered incorrectly. For example, you may have lost a set of traffic loads from the Meridian 1 because the traffic collection module did not collect it properly. In this case, subsequent collections from the Meridian 1 may become numbered differently and the traffic database will be incorrectly indexed. Use the **ReIndex** command to move any incorrectly numbered (indexed) data files to a separate data file (named **LOST.DAT**).

To re-index this improperly indexed data, select **ReIndex** from the File menu. In the File Selection dialog, type the name of the file to which to move this data. The default file name is **LOST.DAT** in the working drive and directory. Click on **OK** to move any incorrectly indexed data in the traffic database into this separate file.

When the **ReIndex** operation is complete, you should merge the re-indexed data into the traffic database. Use **Merge** to update the database to include the re-indexed data.

File groups

Use **File Groups** to create a group file containing the names of a set of database files. This groups similar files together and simplifies data file maintenance. For example, suppose you wish to back up all files with the extension **.DAT**. Create a new group file, then select all files with the extension **.DAT** and include them in the new group file. You can now back up that group file.

To create a new group file, select **File Groups** from the File menu. In the File dialog, enter the name of the group file. Be sure to use the extension **.DFG**.

In the next dialog, click on **Add** to add files to this group file. The file dialog re-appears. Select the files in this list to add them to the group list. Continue to add files to this list by selecting **Add** and selecting the file.

To delete a file from this group list, click on the file name and click on **Delete**. To exit from this group file editor, click on **Exit**.

If you have made any changes to this group file, the system prompts whether you wish to save your changes. Select **Yes** to save these changes and exit. Select **No** to exit without saving these changes. Select **Cancel** to return to the File Groups editor.

Options menu

The Options menu provides access to the **Log Events** selection.

Log events

You can log database maintenance activities to the MAT History File. To do so, open the Options menu and select **Log Events** to toggle event logging. A check mark next to the menu selection indicates that event logging is active.

Leaving Database Maintenance

To close Database Maintenance and return to the Traffic Analysis window, double-click on the control menu box in the upper left corner of the Database Maintenance window.